CU Boulder’s Biomedical Engineering program offers students a flexible degree program to achieve their degree and research goals. Biomedical engineering is an exciting, multidisciplinary field that lies at the intersection of medicine, biology, and engineering.

With a cross-listed curriculum and an interdisciplinary faculty roster, the BME program delivers a multi-faceted and rigorous education in biomedical engineering. Our department consists of 32 faculty members from multiple backgrounds and disciplines. They conduct research in the areas of biomechanics, tissue engineering, biomaterials, drug delivery, molecular imaging, image-guided therapy, point-of-care diagnostics, biosensors, prosthetics, bioastronautics, systems biology, and many more.

Our program offers students the opportunity to take courses in any of the following areas:

- Biomechanics
- Imaging and Diagnostics
- Medical Devices
- Therapeutics

The BME program is directed by Professor Mark Borden. For more information, visit the Biomedical Engineering Program (https://www.colorado.edu/bme/) website.

Course code for this program is BMEN.

Master’s Degree

- Biomedical Engineering · Master of Science (MS) (catalog.colorado.edu/graduate-colleges-schools/engineering-applied-science/programs-study/biomedical-engineering/biomedical-engineering-master-science-ms/)

Doctoral Degree

- Biomedical Engineering · Doctor of Philosophy (PhD) (catalog.colorado.edu/graduate-colleges-schools/engineering-applied-science/programs-study/biomedical-engineering/biomedical-engineering-doctor-philosophy-phd/)

Faculty

While many faculty teach both undergraduate and graduate students, some instruct students at the undergraduate level only. For more information, contact the faculty member’s home department.

Ahmed, Alaa A. (https://experts.colorado.edu/display/fsid_144736/) Associate Professor; PhD, University of Michigan

Alistar, Mirela
Assistant Professor; PhD, Danmarks Tekniske Universitet (Denmark)

Borden, Mark A. (https://experts.colorado.edu/display/fsid_148514/) Associate Professor; PhD, University of California, Davis

Bottenus, Nick
Assistant Professor; PhD, Duke University

Calve, Sarah
Associate Professor; PhD, University of Michigan

Chatterjee, Anushree (https://experts.colorado.edu/display/fsid_151712/) Associate Professor; PhD, University of Minnesota

Clark, Torin K. (https://experts.colorado.edu/display/fsid_155959/) Assistant Professor; PhD, Massachusetts Institute of Technology

Davis, Robert H.
Associate Faculty Director; PhD, Stanford University

Ding, Xiaoyun (https://experts.colorado.edu/display/fsid_158563/) Assistant Professor; PhD, Pennsylvania State University

Ferguson, Virginia L. (https://experts.colorado.edu/display/fsid_110131/) Associate Professor; PhD, University of Colorado Boulder

Fitzgerald, Jessica
Instructor; PhD, Northeastern University

Fox, Jerome Michael (https://experts.colorado.edu/display/fsid_156682/) Assistant Professor; PhD, University of California, Berkeley

Gopinath, Juliet T. (https://experts.colorado.edu/display/fsid_147075/) Associate Professor; PhD, Massachusetts Institute of Technology

Hind, Laurel
Assistant Professor; PhD, University of Pennsylvania

Huang, Shu-Wei (https://experts.colorado.edu/display/fsid_159847/) Assistant Professor; PhD, MIT, Cambridge

Lynch, Maureen Ellen (https://experts.colorado.edu/display/fsid_163404/) Assistant Professor; PhD, Cornell University

McLeod, Robert R. (https://experts.colorado.edu/display/fsid_107547/) Professor; PhD, University of Colorado Boulder

Mukherjee, Debanjan
Assistant Professor

Murray, Todd W. (https://experts.colorado.edu/display/fsid_146549/) Professor; PhD, Johns Hopkins University

Myers, Chris
Professor; PhD, Stanford University

Neu, Corey P. (https://experts.colorado.edu/display/fsid_156210/) Associate Professor; PhD, University of California, Davis

Park, Won (https://experts.colorado.edu/display/fsid_122676/) Associate Professor; Associate Chair; PhD, Georgia Institute of Technology

Piestun, Rafael (https://experts.colorado.edu/display/fsid_118538/) Professor; PhD, Israel Instit of Tech (Israel)

Rentschler, Mark E. (https://experts.colorado.edu/display/fsid_146091/) Associate Professor; PhD, University of Nebraska-Lincoln

Sankaranarayanan, Siram (https://experts.colorado.edu/display/fsid_147413/) Associate Professor; PhD, Stanford University
Shields, C. Wyatt IV  
Assistant Professor; PhD, Duke University

Sprenger, Kayla  
Assistant Professor; PhD, University of Washington

Stansbury, Jeffrey W.  
Professor; PhD, University of Maryland

Tan, Wei (https://experts.colorado.edu/display/fisid_141464/)  
Associate Professor; PhD, University of Illinois at Chicago

Yeh, Tom (https://experts.colorado.edu/display/fisid_151584/)  
Assistant Professor; PhD, Massachusetts Institute of Technology

Courses

**BMEN 5840 (1-6) Independent Study**  
Provides opportunities for independent study at the graduate level.  
Subject and/or project agreed upon by the student and instructor to fit the needs of the student.  
**Repeatable:** Repeatable for up to 30.00 total credit hours.  
**Requisites:** Restricted to Biomedical Engineering (BMEN-MS) graduate students only.

**BMEN 6950 (1-6) Master's Thesis**  
Work with a faculty advisor on a master's thesis.  
**Repeatable:** Repeatable for up to 6.00 total credit hours.  
**Requisites:** Restricted to Biomedical Engineering (BMEN-MS) graduate students only.

**BMEN 8990 (1-10) Doctoral Dissertation**  
Work with a faculty advisor on a doctoral dissertation.  
**Repeatable:** Repeatable for up to 60.00 total credit hours.  
**Requisites:** Restricted to Biomedical Engineering (BMEN) Ph.D. graduate students only.